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Report nr.

1502219-001

TEST

M.U.

RESULTS

25135 DIMENSIONAL CHANGES TO DOMESTIC **WASHING AND DRYING**

Method:

UNI EN ISO 3759:2011; UNI EN ISO 6330:2012;

UNI EN ISO 5077:2008

Instrument:

WASHING-MACHINE ELECTROLUX WASCATOR

mod. FOM 71 MP LAB

Programme of washing: 3G - gentle agitation

Test Temperature:30°C

Drying procedure: type C - Flat dry

Detergent used: ECE (ref.A) - Sodium Perborated - TAED Total air-dry- mass (specimens and ballast): 2,0 kg

Type of ballast used: Type III (polyester)

DIMENSIONAL CHANGE - WIDTH direction

%

0,0

DIMENSIONAL CHANGE - LENGHT direction

0.0

15066 UPHOLSTERY FURNITURE: assessment of the ignitability by SMOULDERING CIGARETTE

Method:

BS 5852:2006

Instrument:

Test rig

Test executed on:

upholstery composites (Clause 11)

Sample pretreatment:

sample wasn't submitted to any pretreatment because it wasn't chemically treated with flame retardant

Ignition source applied:

source 0 (SMOULDERING CIGARETTE)

Materials of test assembly:

Upholstery filling: fire retardant polyurethane foam with a density of

30 kg/m³

Inner cover:

Outer cover: SEE ARTICLE DESCRIPTION

TEST RESULT:

SAMPLE PASSES THE TEST

Note: to assess the ignitability of this sample, the test has been carried out using a fire-retardant polyurethane foam with a density of 30 kg/m³ as filling of the upholstered seating.
The test result could be different using another type of filling material.

Annex n.:

The test measures only the ignitability of a combination of materials used in upholstered seating and not the ignitability of a particular finished item of furniture incorporating these materials. They give an indication of, but cannot guarantee, the ignition behavior of the finished item of furniture.

Details of the results can be seen in the annex of this test report.



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Report nr.

1502219-001

TEST

M.U.

RESULTS

15076 UPHOLSTERY FURNITURE: assessment of the ignitability by MATCH FLAME EQUIVALENT

Method:

BS 5852:2006

instrument:

Test rig

Test executed on:

upholstery composites (Clause 11)

Sample pretreatment:

sample wasn't submitted to any pretreatment because it wasn't chemically treated with flame retardant

Ignition source applied:

source 1 (MATCH FLAME EQUIVALENT)

Materials of test assembly:

Upholstery filling: fire retardant polyurethane foam with a density of

30 kg/m³

Inner cover: -

Outer cover: SEE ARTICLE DESCRIPTION

TEST RESULT:

SAMPLE PASSES THE TEST

Note: to assess the ignitability of this sample, the test has been carried out using a NON fire-retardant polyurethane foam with a density of 21 kg/m³ as filling of the upholstered seating.

The test result could be different using another type of filling material.

Annex n.:

2F

The test measures only the ignitability of a combination of materials used in upholstered seating and not the ignitability of a particular finished item of furniture incorporating these materials. They give an indication of, but cannot guarantee, the ignition behavior of the finished item of furniture.

Details of the results can be seen in the annex of this test report.

15566 UPHOLSTERY FURNITURE: assessment of the ignitability by SMOULDERING CIGARETTE

Method:

UNI EN 1021-1:2014

Instrument:

Small Test Rig for Flammability test

Sample pretreatment:

sample wasn't submitted to any pretreatment because it wasn't chemically treated with flame retardant

Ignition source applied:

source 0 (SMOULDERING CIGARETTE)

Materials of test assembly:

Upholstery filling: fire retardant polyurethane foam with a density of

30 kg/m³

Inner cover: -

Outer cover: SEE ARTICLE DESCRIPTION

TEST RESULT:

SAMPLE PASSES THE TEST - NON

IGNITION

Note: to assess the ignitability of this sample, the test has been carried out using a fire-retardant polyurethane foam with a density of 30 kg/m³ as filling of the upholstered seating.

The test result could be different using another type of filling material.

Annex n.:

3F



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Report nr.

1502219-001

TEST

M.U.

RESULTS

15576 UPHOLSTERY FURNITURE: assessment of the ignitability by MATCH FLAME EQUIVALENT

Method:

UNI EN 1021-2:2014

Instrument:

Small Test Rig and burner for Flammability test

Sample pretreatment:

sample wasn't submitted to any pretreatment because it wasn't chemically treated with flame retardant

Ignition source applied:

source 1 (MATCH FLAME EQUIVALENT)

Materials of test assembly:

Upholstery filling: fire retardant polyurethane foam with a density of

30 kg/m³

Inner cover: -

Outer cover: SEE ARTICLE DESCRIPTION

TEST RESULT:

SAMPLE PASSES THE TEST - NON

IGNITION

Note: to assess the ignitability of this sample, the test has been carried out using a fire-retardant polyurethane foam with a density of 30 kg/m³ as filling of the upholstered seating. The test result could be different using another type of filling material.

Annex n.:

4F



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Annex n. 1F to test report n. 1502219-001

DETAILS OF TEST RESULTS

Test executed according to BS 5852:2006 – Clause 11 (composites):

Method of test for assessment of the ignitability of upholstered seating by smouldering and flaming

ignition sources.

Ignition source type 0: CIGARETTE

Article description: LUNA

Declared composition: 100% Polyester Trevira

Materials of test assembly:

Upholstery filling: fire-retardant polyurethane foam with a density of 30 kg/m³

Inner cover: -

Outer cover: see article description

Conditioning of test specimen and ignition source: 23±2°C, 50±5% r.h.

Testing temperature and r.h.: 19 °C, 50 % r.h.

Sample pre-treatment: sample wasn't subjected to any pretreatment

Date of test: 25.03.2015

ignition source		1.st cigarette	2.nd cigarette
duration of ignition source (min)		27	26
duration flame (min)		0	0
duration s	moke (min)	27	26
(*) extent of damage of horizontal component	length (mm)	71	72
	width (mm)	13	13
	depth (mm)	6	5
(*) extent of damage of vertical component	height (mm)	14	15
	depth (mm)	3	3
TEST RESULT	Ignition/ Non Ignition	Non Ignition	Non Ignition

^{(*) =} total extent of sample's damage without subtracting the cigarette dimensions

TEST RESULT: SAMPLE PASSES THE TEST - NON IGNITION

The above test result relate only to the ignitability of the combination of upholstery composites (Clause 11) under the particular conditions of test.

They are not intended as a means of assessing the full potential fire hazard of the materials or products in use.



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Annex n. 2F to test report n. 1502219-001

DETAILS OF TEST RESULTS

Test executed according to BS 5852:2006 – Clause 11 (composites):

Method of test for assessment of the ignitability of upholstered seating by smouldering and flaming ignition sources.

Ignition source type 1: MATCH FLAME EQUIVALENT

Article description: LUNA

Declared composition: 100% Polyester Trevira

Materials of test assembly:

Upholstery filling: fire-retardant polyurethane foam with a density of 30 kg/m³

Inner cover: -

Outer cover: see article description

Conditioning of test specimen: 23±2°C, 50±5% r.h. Testing temperature and r.h.: 19 °C, 50 % r.h.

Sample pre-treatment: sample wasn't subjected to any pretreatment

Date of test: 25.03.2015

ignitio	n source	1.st test	2.nd test
duration	flames (s)	0	0
duration	smoke (s)	21	19
extent of damage of horizontal component	Length (mm)	21	17
	Width (mm)	8	15
	Depth (mm)	2	2
extent of damage of	Width (mm)	26	19
vertical component	Depth (mm)	6	6
TEST RESULT	Ignition/ Non Ignition	Non Ignition	Non Ignition

TEST RESULT: SAMPLE PASSES THE TEST - NON IGNITION

The above test result relate only to the ignitability of the combination of upholstery composites (Clause 11) under the particular conditions of test.

They are not intended as a means of assessing the full potential fire hazard of the materials or products in use.



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Annex n. 3F to test report n. 1502219-001

DETAILS OF TEST RESULTS

Test executed according to UNI EN 1021-1:2014 (EN 1021-1:2014) Furniture - Assessment of the ignitability of upholstered furniture Part 1: Ignition source: smouldering cigarette

Article description: LUNA

Declared composition: 100% Polyester Trevira

Materials of test assembly:

Upholstery filling: fire-retardant polyurethane foam with a density of 30 kg/m³

Inner cover: -

Outer cover: see article description

Conditioning of test specimen: 23 ± 2 °C, 50 ± 5 % r.h.

Testing temperature and r.h.: 19 °C, 50 % r.h.

Sample pre-treatment: sample wasn't submitted to any pretreatment because it wasn't chemically treated

with flame retardant
Date of test: 25.03.2015

SMOULDERING CRITERIA:	first cigarette	second cigarette	third cigarette	Comments
Smouldering criteria:				
Unsafe escalating combustion	NO	NO	=	. <u>**</u> 2
Test assembly consumed	NO	NO	-	:ex
Smoulders to extremities	NO	NO	-	
Smoulders through thickness	NO	NO	=	•
Smoulders more than 1 h	NO	NO	-	Time elapsed between placing the cigarette and extinguishing 1st cigarette: 27 min 2nd cigarette: 26 min
In final examination, presence of active smouldering	NO	NO	2	=
Flaming criteria:				
Evidence of flames	NO	NO	-	標8

YES = criteria observed

NO = criteria not observed

TEST RESULT: SAMPLE PASSES THE TEST - NON IGNITION

The above test results relate only to the ignitability of the combination of materials under the particular conditions of test.

They are not intended as a means of assessing the full potential fire hazard of the material in use.

The probability that the observation criteria mentioned represent the true is equal to 95%. The expanded uncertainty is calculated by multiplying the combined standard uncertainty for a coverage factor K = 2, which for a normal distribution leads to a confidence level of approximately 95%.



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Annex n. 4F to test report n. 1502219-001

DETAILS OF TEST RESULTS

Test executed according to UNI EN 1021-2:2006 (EN 1021-1:2006) Furniture - Assessment of the ignitability of upholstered furniture Part 2: Ignition source: match flame equivalent

Article description: LUNA

Declared composition: 100% Polyester Trevira

Materials of test assembly:

Upholstery filling: fire-retardant polyurethane foam with a density of 30 kg/m³

Inner cover: -

Outer cover: see article description

Conditioning of test specimen: 23 ± 2 °C, 50 ± 5 % r.h.

Testing temperature and r.h.: 19°C, 50% r.h.

Sample pre-treatment: sample wasn't submitted to any pretreatment because it wasn't chemically treated

with flame retardant Date of test: 24.03.2015

SMOULDERING CRITERIA:		2nd test	3rd test	Comments
Smouldering criteria:				
Unsafe escalating combustion		NO	NO	-
Test assembly consumed	NO	NO	NO	-
Smoulders to extremities		NO	NO	
Smoulders through thickness		NO	NO	-
Smoulders more than 1 hour		NO	NO	Time smouldering: 1st test: 21 s 2nd test: 19 s 3rd test: 23 s
In final examination, presence of active smouldering		NO	NO	•
Flaming criteria:				
Unsafe escalating combustion		NO	NO	-
Test assembly consumed		NO	NO	<u>=</u>
Flames to extremities		NO	NO	=
Flames through thickness		NO	NO	-
Flames more than 120 s		NO	NO	Time flaming: 1st test: 0 s 2nd test: 0 s 3rd test: 0 s

YES = criteria observed NO = criteria not observed

TEST RESULT: SAMPLE PASSES THE TEST - NON IGNITION

The above test results relate only to the ignitability of the combination of materials under the particular conditions of test. They are not intended as a means of assessing the full potential fire hazard of the material in use.

The probability that the observation criteria mentioned represent the true is equal to 95%. The expanded uncertainty is calculated by multiplying the combined standard uncertainty for a coverage factor K = 2, which for a normal distribution leads to a confidence level of approximately 95%.